end extending beyond the second distal end to define a junction which abuts against a crotch in the bifurcated body passageway;

characterized in that a guidewire is disposed in the first tubular passageway and the second tubular passageway is free of any guidewire.

62
~~57~~. The endovascular sleeve defined in claim 56, further comprising a radioopaque marker disposed thereon.

63
~~58~~. The endovascular sleeve defined in claim 57, wherein the radioopaque marker is disposed at the junction.

64
~~59~~. The endovascular sleeve defined in claim 56, wherein the first passageway has a substantially circular cross-section.

65
~~60~~. The endovascular sleeve defined in claim 56, wherein the second passageway has a substantially circular cross-section.

66
~~61~~. The endovascular sleeve defined in claim 56, wherein both the first passageway and the second passageway have a substantially circular cross-section.

67 62. The endovascular sleeve defined in claim 56, wherein the first distal end extends beyond the second distal end by a margin of at least about 0.3 cm.

Sub B2 68 63. The endovascular sleeve defined in claim 56, wherein the first distal end extends beyond the second distal end by a margin in the range of from about 0.3 to about 3 cm.

A1 Cont

69 64. The endovascular sleeve defined in claim 56, wherein the first distal end extends beyond the second distal end by a margin in the range of from about 0.5 to about 2 cm.

70 65. The endovascular sleeve defined in claim 56, wherein the first distal end is chamfered.

71 66. The endovascular sleeve defined in claim 56, wherein the second distal end is chamfered.

72 67. The endovascular sleeve defined in claim 56, wherein both the first distal end and the second distal end are chamfered.

73 68. A bifurcated stent delivery system for delivery of an expansible prosthesis to a bifurcated body passageway, the system comprising:

a catheter;

guidewire; and

an endovascular sleeve comprising a first tubular passageway and a second tubular passageway fixed with respect to one another, the first tubular passageway comprising a first distal end and a first proximal end, the second tubular passageway comprising a second distal end and a second proximal end, the first distal end extending beyond than the second distal end to define a junction which abuts against a crotch in the bifurcated body passageway;

characterized in that the guidance is disposed in the first tubular passageway and the second tubular passageway is free of any guidewire.

74
69. The kit defined in claim 68, wherein the endovascular sleeve further comprises a radioopaque marker disposed thereon.

75
70. The kit defined in claim 69, wherein the radioopaque marker is disposed at the junction.

76
71. The kit defined in claim 68, wherein the first passageway has a substantially circular cross-section.

77
72. The kit defined in claim 68, wherein the second passageway has a substantially circular cross-section.

78

73. The kit defined in claim 68, wherein both the first passageway and the second passageway have a substantially circular cross-section.

79

74. The kit defined in claim 68, wherein the first distal end is at least about 0.3 cm is longer than the second distal end.

80

75. The kit defined in claim 68, wherein the first distal end is longer than the second distal end by a margin in the range of from about 0.3 to about 3 cm.

81

76. The kit defined in claim 68, wherein the first distal end is longer than the second distal end by a margin in the range of from about 0.5 to about 2 cm.

82

77. The kit defined in claim 68, wherein the first distal end is chamfered.

83

78. The kit defined in claim 68, wherein the second distal end is chamfered.

84

79. The kit defined in claim 68, wherein both the first distal end and the second distal end are chamfered.

85

80. The kit defined in claim 68, wherein the catheter comprises at least one expandable member.

86
81. The kit defined in claim 80, wherein the expandable member is disposed adjacent a distal end of the catheter.

87
82. The kit defined in claim 80, wherein the catheter comprises two expandable members.

88
83. The kit defined in claim 80, wherein the catheter comprises a substantially Y-shaped expandable member.

A1 Cont

89
84. The kit defined in claim 80, wherein the expandable member is a balloon.

90
85. The kit defined in claim 80, further comprising a bifurcated stent disposed on the expandable member.

91
86. The kit defined in claim 85, wherein the bifurcated stent is mounted on the expandable member.

92
87. A method for delivery of a bifurcated stent to a target bifurcated body passageway having a proximal body passageway, a first distal body passageway and a second distal body passageway using an endovascular sleeve comprising a first tubular passageway and a second tubular passageway fixed with respect to one another, the first

tubular passageway comprising a first distal end and a first proximal end, the second tubular passageway comprising a second distal end and a second proximal end, the first distal end being longer than the second distal end to define a junction which abuts against a crotch in the bifurcated body passageway, the method comprising the steps of:

(i) navigating a first guidewire through the primary proximal body passageway and into the first distal body passageway;

(ii) feeding the first tubular passageway of the endovascular sleeve over the first guidewire;

(iii) navigating the endovascular sleeve through the primary proximal body passageway until the first distal end is disposed in the first distal body passageway and the junction abuts a crotch in the bifurcated body passageway;

(iv) navigating a second guidewire through the second tubular passageway and into the second distal body passageway;

(v) withdrawing the endovascular sleeve from the body passageway;

(vi) guiding a catheter over the first guidewire and the second guidewire, the catheter having a bifurcated stent disposed thereon;

(vii) navigating the bifurcated stent to the target bifurcated body passageway; and

(viii) expanding the bifurcated stent.

93
88. The method defined in claim 87, wherein the catheter further comprises at least one expandable member on which the bifurcated stent is disposed and Step (viii) comprises expanding the expandable member to convey a radially expansive force to the bifurcated stent.

94
89. The method defined in claim 88, wherein the expandable member is disposed adjacent a distal end of the catheter.

a1 Cont

95
90. The method defined in claim 88, wherein the catheter comprises two expandable members.

96
91. The method defined in claim 88, wherein the catheter comprises a substantially Y-shaped expandable member.

97
92. The method defined in claim 88, wherein the expandable member is a balloon.

98
93. The method defined in claim 87, wherein the bifurcated stent is constructed of a plastically deformable material.

99
94. The method defined in claim 87, wherein the bifurcated stent is constructed of stainless steel.

100

~~95~~. The method defined in claim 87, wherein the bifurcated stent is constructed of a self-expanding material.

101

~~96~~. The method defined in claim 87, wherein the catheter further comprises a sheath covering the bifurcated stent and Step (viii) comprises removing the sheath to expose the bifurcated stent resulting in a radially expansive force thereon.

A1 Cont

102

~~97~~. The method defined in claim 95, wherein the self-expanding material is nitinol.

103

~~98~~. The method defined in claim 95, wherein the self-expanding material expands at a temperature of greater than about 30°C.

104

~~99~~. The method defined in claim 95, wherein the self-expanding material expands at a temperature of in the range of from about 30° to about 40°C.

105

~~100~~. The method defined in claim 87, wherein the endovascular sleeve further comprises a radioopaque marker disposed thereon.

106

~~101~~. The method defined in claim 100, wherein the radioopaque marker is disposed at the junction.

107
~~102~~. The method defined in claim 87, wherein the first passageway has a substantially circular cross-section.

108
~~103~~. The method defined in claim 87, wherein the second passageway has a substantially circular cross-section.

109
~~104~~. The method defined in claim 87, wherein both the first passageway and the second passageway have a substantially circular cross-section.

A1 cont'd

110
~~105~~. The method defined in claim 87, wherein the first distal end is at least about 0.3 cm is longer than the second distal end.

111
~~106~~. The method defined in claim 87, wherein the first distal end is longer than the second distal end by a margin in the range of from about 0.3 to about 3 cm.

112
~~107~~. The method defined in claim 87, wherein the first distal end is longer than the second distal end by a margin in the range of from about 0.5 to about 2 cm.

113
~~108~~. The method defined in claim 87, wherein the first distal end is chamfered.

114
~~109~~. The method defined in claim 87, wherein the second distal end is chamfered.

115 ~~110~~. The method defined in claim 87, wherein both the first distal end and the second distal end are chamfered.

116 ~~111~~. The endovascular sleeve defined in claim 56, wherein the second proximal end extends beyond the first proximal end.

117 ~~112~~. The endovascular sleeve defined in claim 111, wherein the first tubular passageway has a length such that the first proximal end does not emanate from a subject and the second tubular passageway has a length such that the second proximal emanates from the subject.

118 ~~113~~. The endovascular sleeve defined in claim 56, wherein the second proximal end the first proximal end and the second proximal end are substantially juxtaposed.

119 ~~114~~. The endovascular sleeve defined in claim 113, wherein the first tubular passageway and the second tubular passageway have a length such that the first proximal end and the second proximal end each emanate from a subject.

120 ~~115~~. The endovascular sleeve defined in claim 56, wherein the first tubular passageway and the second tubular passageway are each constructed of a material having sufficient integrity to be navigated through tortuous body passageways.--

A1 Cancel

Applicants' undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 625-3500. All correspondence should continue to be directed to our address given below.

Respectfully submitted,

Attorney for Applicants

Registration No. 31,588

PATENT ADMINISTRATOR
KATTEN MUCHIN ZAVIS
525 West Monroe Street
Suite 1600
Chicago, Illinois 60661-3693
Facsimile: (312) 902-1061